

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN092019\  
 Data File : VN058235.D  
 Acq On : 20 Sep 2019 9:26  
 Operator : JC/SP  
 Sample : VN0920WBL01  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0920WBL01

Quant Time: Sep 21 05:37:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\624N090919W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Sep 09 12:14:07 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.17  | 128  | 73562    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.57  | 114  | 434708   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.41 | 117  | 364397   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 8.01   | 65    | 204617   | 31.45    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 104.83% |
| 60) 4-Bromofluorobenzene  | 12.40  | 95    | 173467   | 27.82    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 92.73%  |
| 63) Toluene-d8            | 10.08  | 98    | 530578   | 30.34    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 101.13% |

## Target Compounds

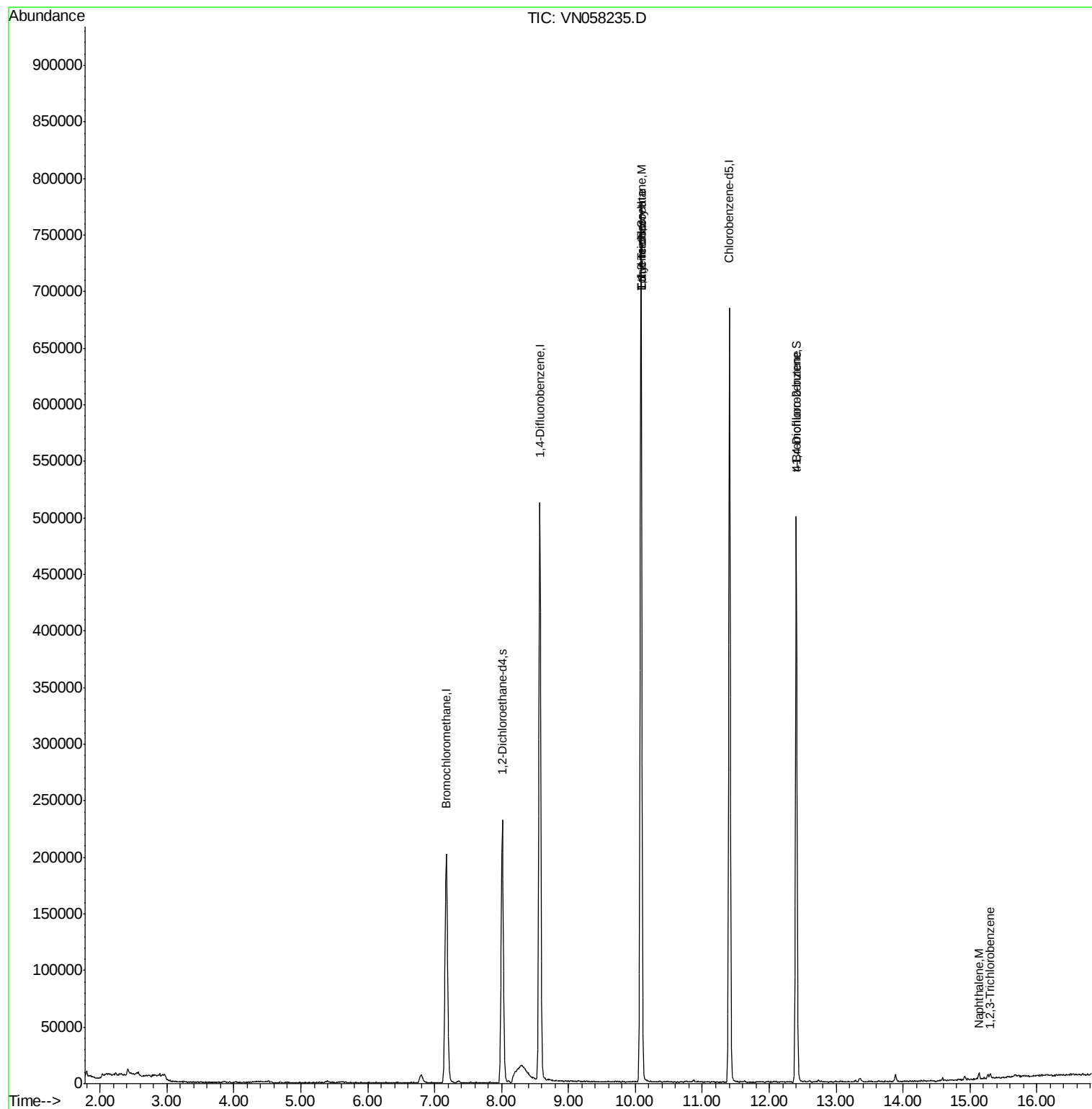
|                             |       |     |       |        | Qvalue |    |
|-----------------------------|-------|-----|-------|--------|--------|----|
| 50) 1,1,2-Trichloroethane   | 10.09 | 97  | 16084 | 3.204  | ug/l # | 1  |
| 51) Ethyl methacrylate      | 10.09 | 69  | 1769  | 0.227  | ug/l   | 82 |
| 77) t-1,4-Dichloro-2-butene | 12.40 | 75  | 93101 | 51.971 | ug/l # | 1  |
| 91) Naphthalene             | 15.14 | 128 | 4924  | 0.312  | ug/l   | 96 |
| 92) 1,2,3-Trichlorobenzene  | 15.31 | 180 | 1409  | 0.257  | ug/l   | 71 |

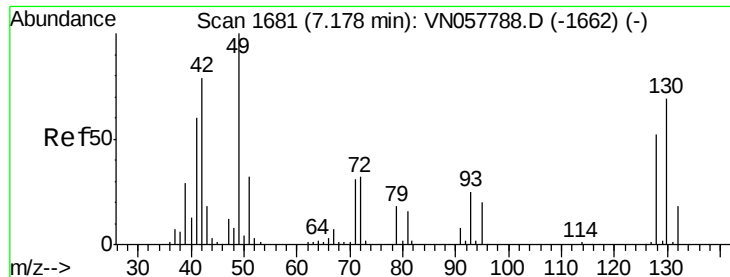
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : VN0920WBL01  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0920WBL01

Quant Time: Sep 21 05:37:20 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\624N090919W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Mon Sep 09 12:14:07 2019  
Response via : Initial Calibration

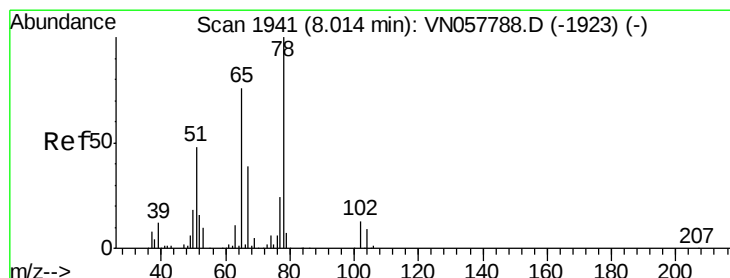
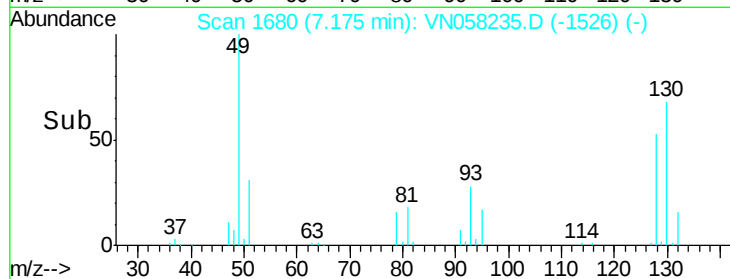
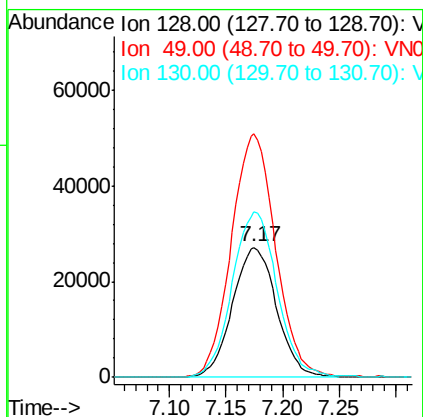
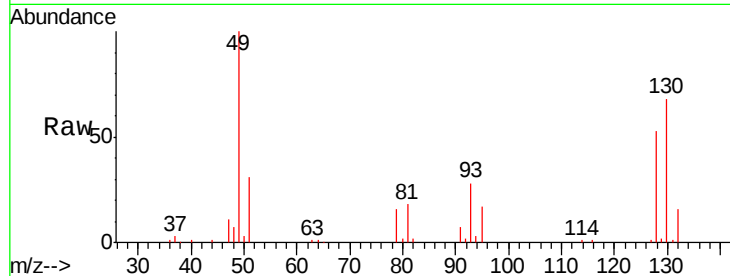




#1  
 Bromochloromethane  
 Concen: 30.000 ug/l  
 RT: 7.17 min Scan# 1680  
 Delta R.T. -0.00 min  
 Lab File: VN058235.D  
 Acq: 20 Sep 2019 9:26

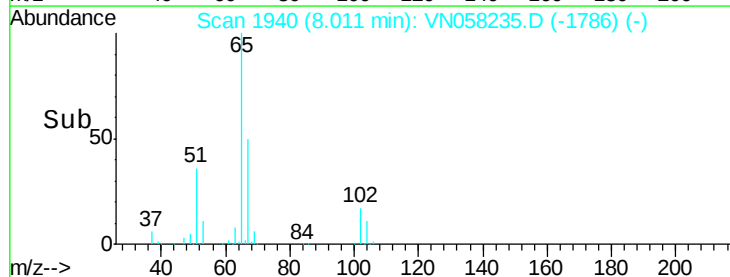
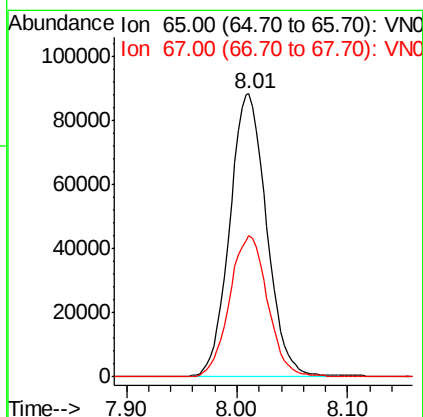
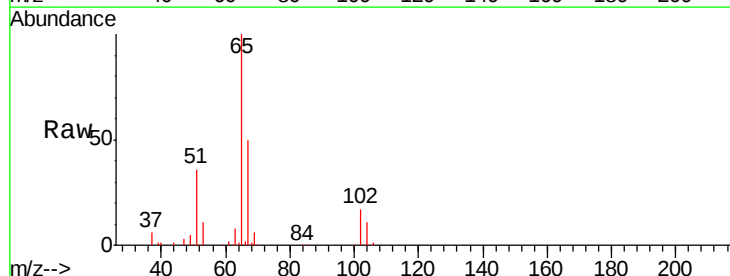
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 VN0920WBL01

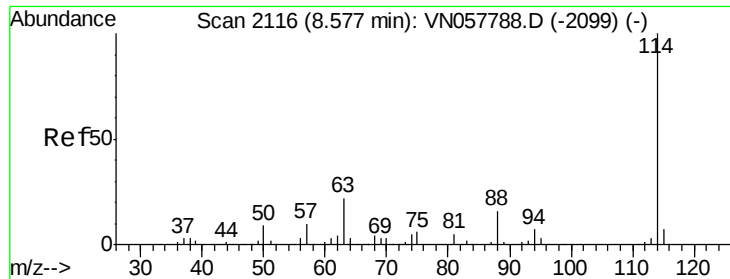
Tgt Ion:128 Resp: 73562  
 Ion Ratio Lower Upper  
 128 100  
 49 188.2 0.0 486.5  
 130 129.9 0.0 324.5



#27  
 1,2-Dichloroethane-d4  
 Concen: 31.446 ug/l  
 RT: 8.01 min Scan# 1940  
 Delta R.T. -0.00 min  
 Lab File: VN058235.D  
 Acq: 20 Sep 2019 9:26

Tgt Ion: 65 Resp: 204617  
 Ion Ratio Lower Upper  
 65 100  
 67 51.2 40.9 61.3

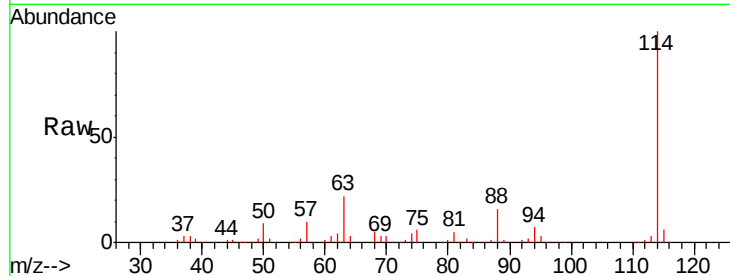




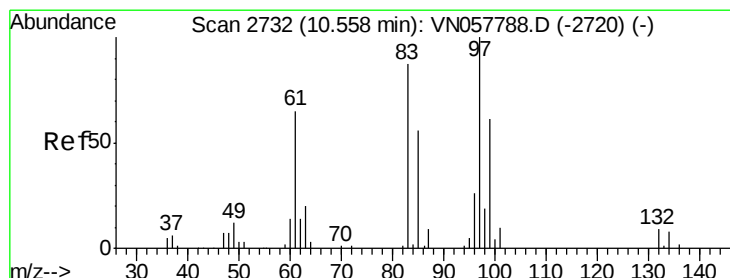
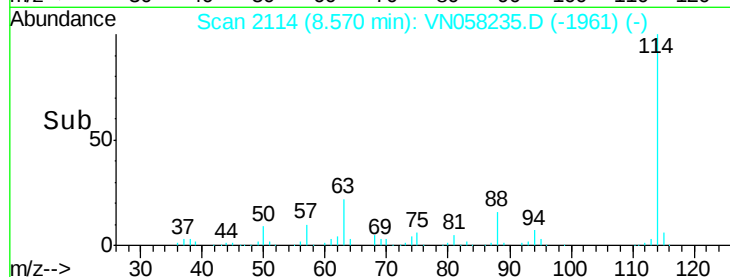
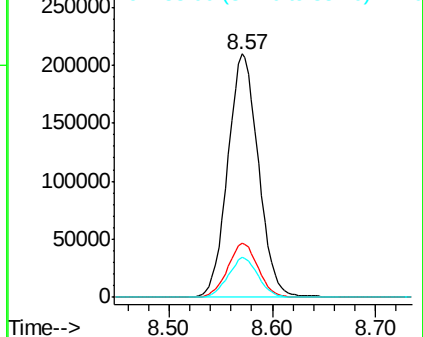
#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 8.57 min Scan# 2114  
 Delta R.T. -0.01 min  
 Lab File: VN058235.D  
 Acq: 20 Sep 2019 9:26

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0920WBL01

Tgt Ion: 114 Resp: 434708  
 Ion Ratio Lower Upper  
 114 100  
 63 22.1 18.0 27.0  
 88 16.0 12.6 19.0

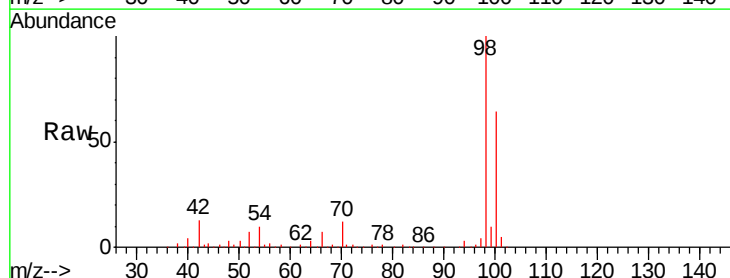


Abundance Ion 114.00 (113.70 to 114.70): V  
 Ion 63.00 (62.70 to 63.70): VNO  
 Ion 88.00 (87.70 to 88.70): VNO

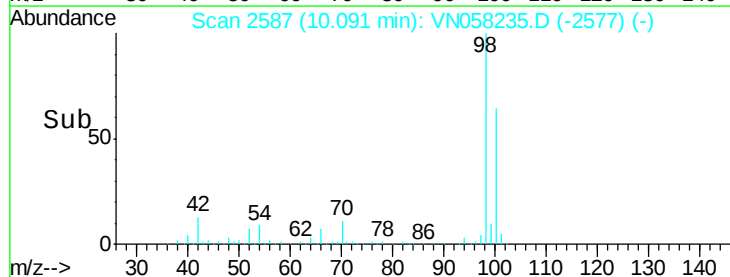
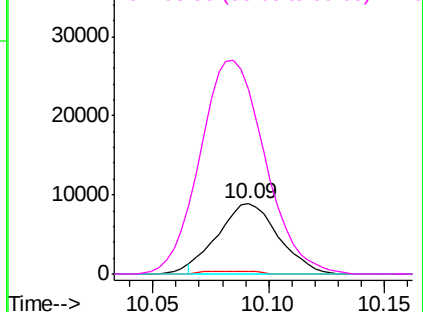


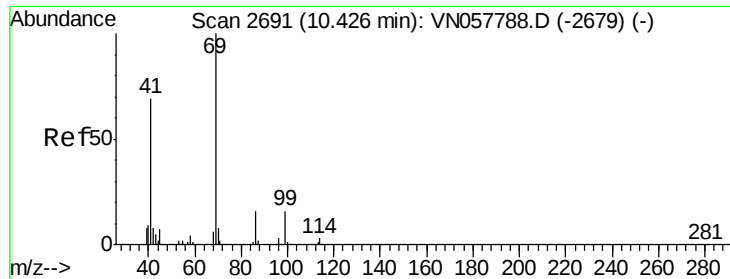
#50  
 1,1,2-Trichloroethane  
 Concen: 3.204 ug/l  
 RT: 10.09 min Scan# 2587  
 Delta R.T. -0.47 min  
 Lab File: VN058235.D  
 Acq: 20 Sep 2019 9:26

Tgt Ion: 97 Resp: 16084  
 Ion Ratio Lower Upper  
 97 100  
 83 4.1 69.4 104.2#  
 85 0.0 45.0 67.6#  
 99 258.7 48.8 73.2#



Abundance Ion 97.00 (96.70 to 97.70): VNO  
 Ion 82.95 (82.65 to 83.65): VNO  
 Ion 84.95 (84.65 to 85.65): VNO  
 Ion 98.95 (98.65 to 99.65): VNO





#51

Ethyl methacrylate

Concen: 0.227 ug/l

RT: 10.09 min Scan# 2586

Delta R.T. -0.34 min

Lab File: VN058235.D

Acq: 20 Sep 2019 9:26

Instrument :

MSVOA\_N

ClientSampleId :

VN0920WBL01

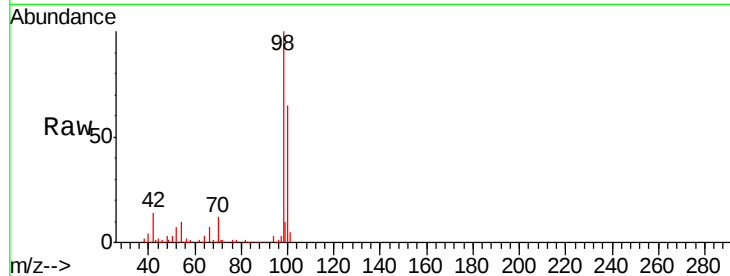
Tgt Ion: 69 Resp: 1769

Ion Ratio Lower Upper

69 100

41 90.8 34.5 103.5

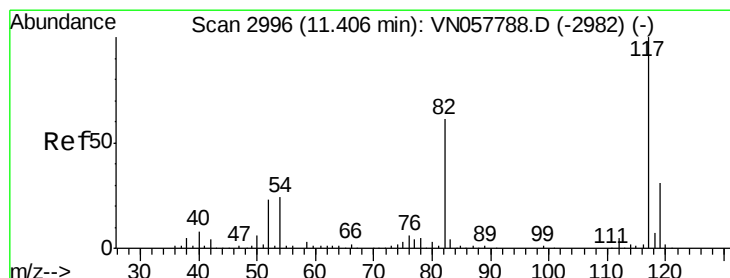
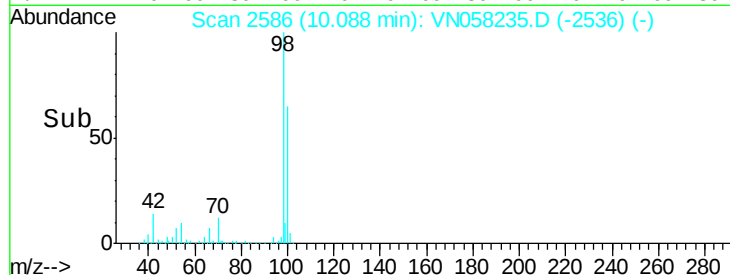
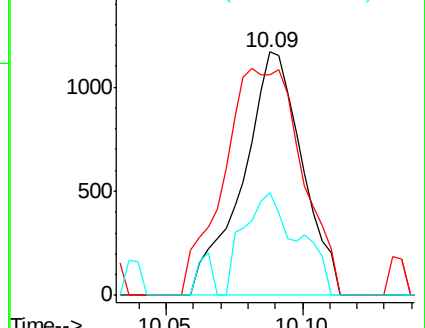
39 42.3 22.4 67.3



Abundance Ion 69.00 (68.70 to 69.70): VN0

Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN058235.D

Acq: 20 Sep 2019 9:26

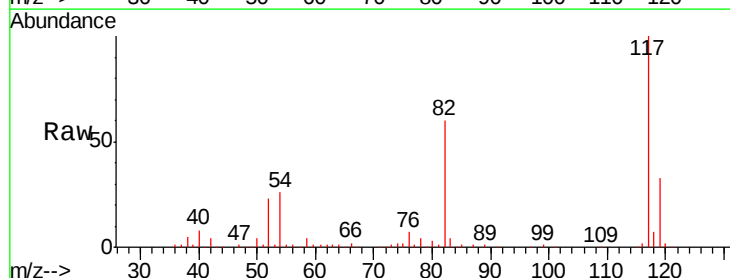
Tgt Ion: 117 Resp: 364397

Ion Ratio Lower Upper

117 100

82 59.2 47.6 71.4

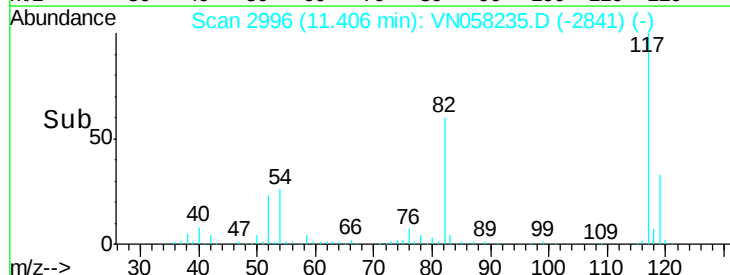
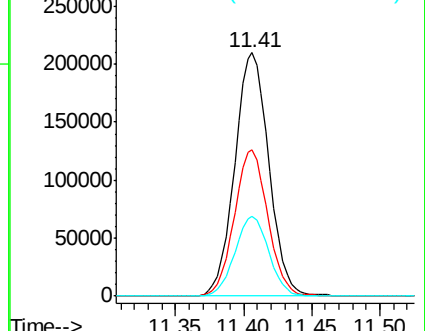
119 32.7 25.4 38.2

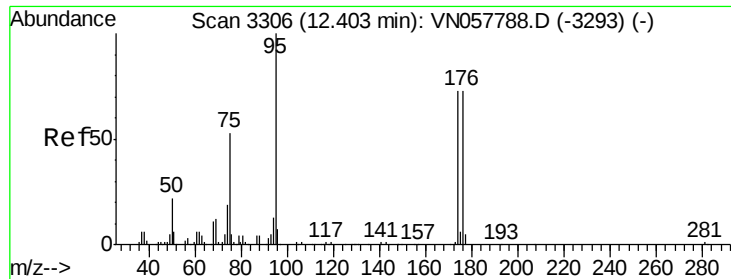


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): VN0

Ion 119.00 (118.70 to 119.70): V

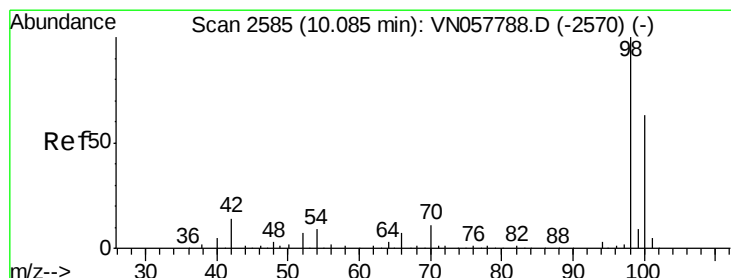
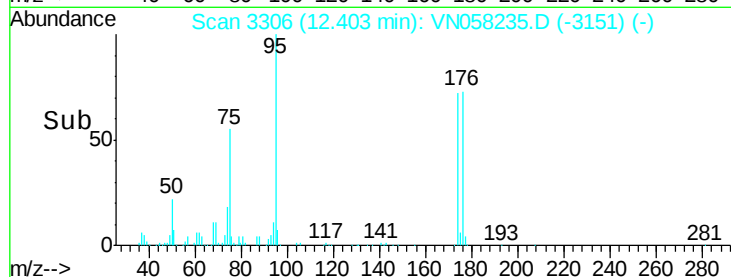
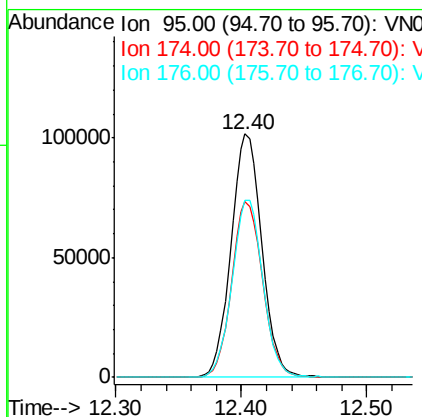
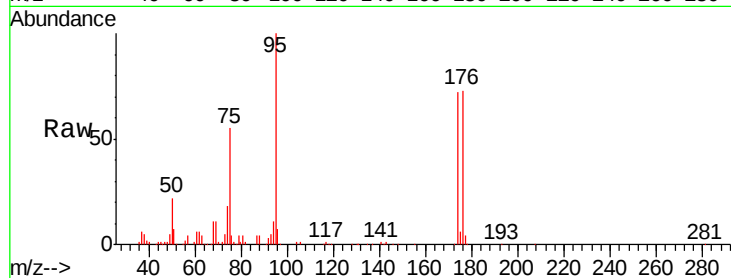




#60  
4-Bromofluorobenzene  
Concen: 27.819 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. -0.00 min  
Lab File: VN058235.D  
Acq: 20 Sep 2019 9:26

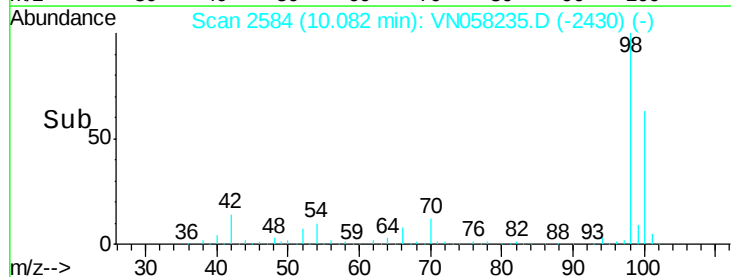
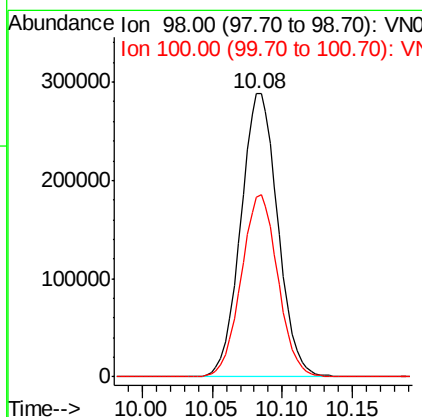
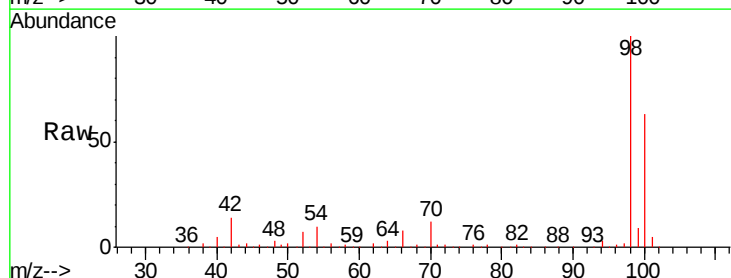
Instrument :  
MSVOA\_N  
ClientSampled :  
VN0920WBL01

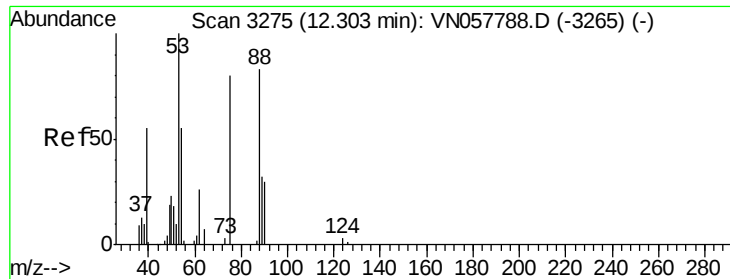
Tgt Ion: 95 Resp: 173467  
Ion Ratio Lower Upper  
95 100  
174 72.3 59.4 89.0  
176 72.7 57.4 86.0



#63  
Toluene-d8  
Concen: 30.335 ug/l  
RT: 10.08 min Scan# 2584  
Delta R.T. -0.00 min  
Lab File: VN058235.D  
Acq: 20 Sep 2019 9:26

Tgt Ion: 98 Resp: 530578  
Ion Ratio Lower Upper  
98 100  
100 63.7 50.3 75.5

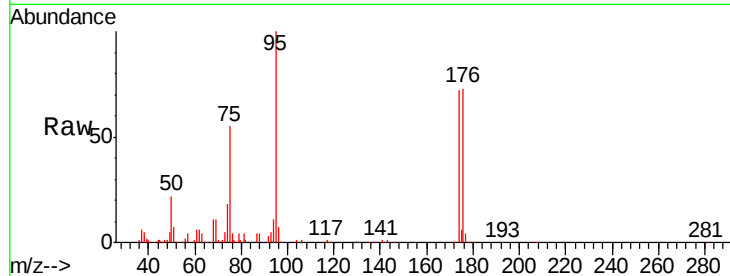




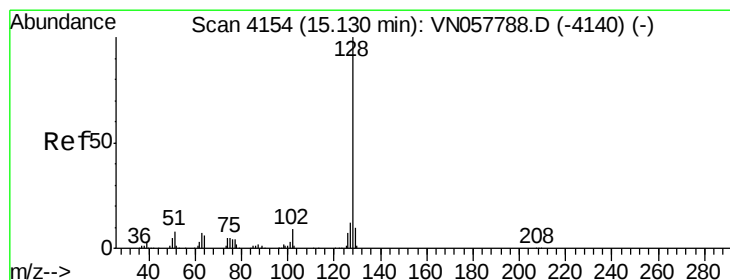
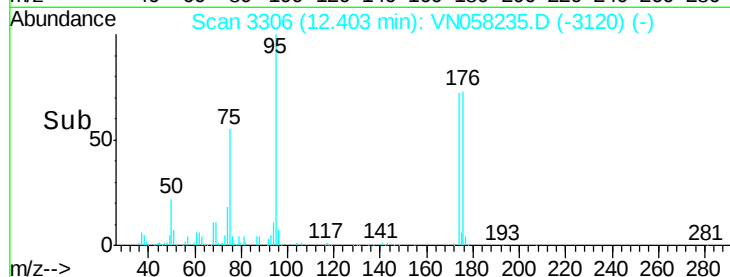
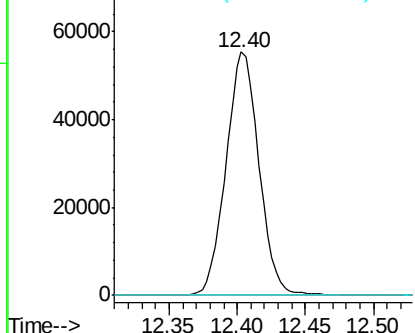
#77  
t-1,4-Dichloro-2-butene  
Concen: 51.971 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.10 min  
Lab File: VN058235.D  
Acq: 20 Sep 2019 9:26

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0920WBL01

Tgt Ion: 75 Resp: 93101  
Ion Ratio Lower Upper  
75 100  
53 0.0 62.7 188.2#  
89 0.0 22.8 68.3#

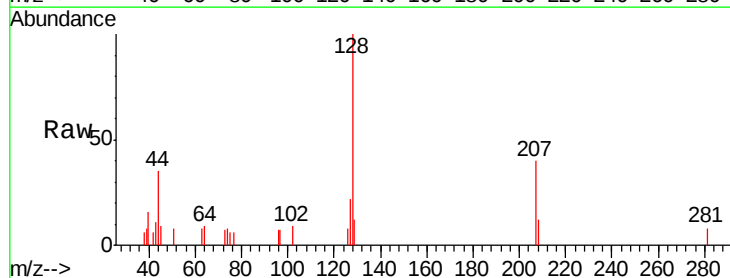


Abundance Ion 75.00 (74.70 to 75.70): VN0  
Ion 53.00 (52.70 to 53.70): VN0  
Ion 89.00 (88.70 to 89.70): VN0

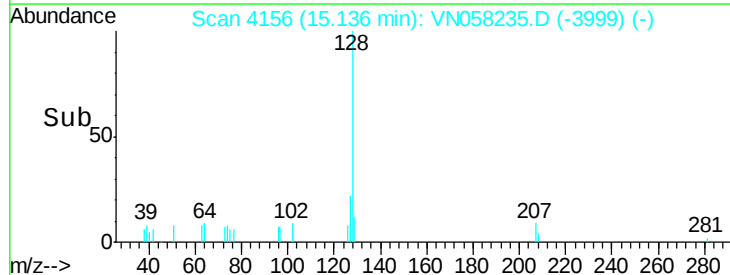
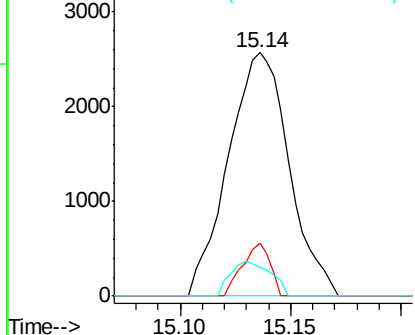


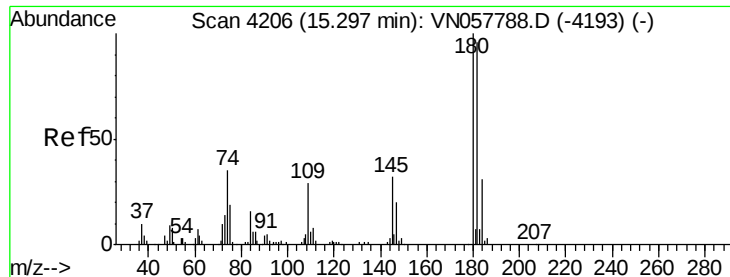
#91  
Naphthalene  
Concen: 0.312 ug/l  
RT: 15.14 min Scan# 4156  
Delta R.T. 0.01 min  
Lab File: VN058235.D  
Acq: 20 Sep 2019 9:26

Tgt Ion: 128 Resp: 4924  
Ion Ratio Lower Upper  
128 100  
127 10.0 9.9 14.9  
129 9.4 8.1 12.1



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V

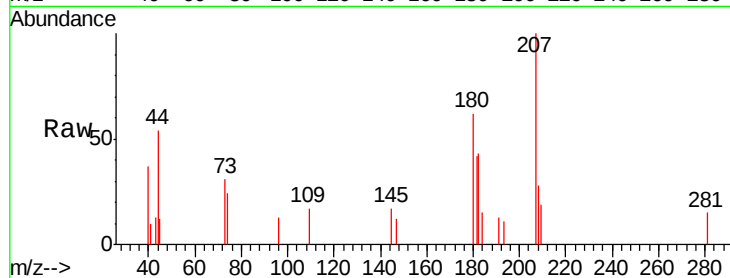




#92  
 1,2,3-Trichlorobenzene  
 Concen: 0.257 ug/l  
 RT: 15.31 min Scan# 4209  
 Delta R.T. 0.01 min  
 Lab File: VN058235.D  
 Acq: 20 Sep 2019 9:26

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0920WBL01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 58.1  | 0.0   | 189.8 |
| 145     | 31.2  | 0.0   | 65.0  |



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V

